FINAL

CLIFTON RANGER DISTRICT
APACHE/SITGREAVES NATIONAL FOREST
ANNUAL OPERATING INSTRUCTIONS (AOI)

Double Circles
Scott, Wendy, Jason and Jennifer Bryce
2019

I. PERMITTED USE:

The following table illustrates the number of livestock and season of use permitted on the Double Circles Allotment as per Term Grazing Permit # 030103020 issued to Scott, Wendy, Jason and Jennifer Bryce on 12/10/2012.

KIND	CLASS	NUMBERS	AUM	SEASON OF USE
Cattle	Cow/Calf	411	6510	03/01/2019-02/28/2020
Horse/Mule	Horse/Mule	18	259	03/01/2019-02/28/2020

II. AUTHORIZED USE:

The following numbers and classes of livestock are authorized to graze on the _____ Allotment this year.

KIND	CLASS	NUMBERS	AUM	SEASON OF USE (grazing year 03/01/19-02/28/2020)
Cattle	Cow/Calf	300		03/01/2019-02/28/2020
	Bull	28		03/01/2019-02/28/2020
	Total Head:			
Horse/Mule	Mature	4		03/01/2019-02/28/2020

III. ROTATION SCHEDULE: (Livestock use is authorized as follows in the pasture rotation schedule. Deviations from this must be made in advance and amended in the AOI.

Actual dates may vary (+ or – 5 days) dependent on utilization levels, range conditions and time required moving livestock.

PASTURE		NUMBER	SEASON OF USE(calendar)	GRAZING INTENSITY	KEY AREA	KEY SPP
Open Draw	Herd #1	*108*	*03/01-8/31/2019*	*30 – 40%*	*C2, P1*	*Bogr, Bohi 2.5in*
ST Trap/Cottonwood	Herd #1	108	09/01 -12/31/19	*30 – 40%*		
Grey Peak/Table Top	Herd #1	108	01/01/2020 - /2/28/20	*30 – 40%*		
Cross H & Weaning Trap			REST	*30 – 40%*		
East Dry	Herd #2		REST	*30 – 40%*		
NO East	Herd #2	68	03/01- 06/30/2019	*30 – 40%*		
Upper Sheep Wash			REST	*30 – 40%*		
Lower Sheep Wash	Herd #2	68	7/01 – 09/30/2019	*30 – 40%*		
Butte Trap	Herd #2	68	10/01 – 2/28/2020	*30 – 40%*		
Big Dry	Herd #3		REST	*30 – 40%*		
Bee Spring	Herd #3	70	03/01 – 07/30/2019	*30 – 40%*		
Freeport	Herd #3	70	08/01 – 12/31/19	*30 – 40%*		
DC Fields	Herd #3	70	01/01/20-02/28/20	*30 – 40%*		

ENTERED

Pruner	Herd #3		REST	*30 – 40%*		
4 Bar	Herd #4	82	03/01 – 07/30/2019	*30 – 40%*		
Main	Herd #4	82	8/01 – 02/28/2020 TBD alternate	*30 – 40%*		
Smith Canyon			REST	*30 – 40%*		
Dance Hall		4 Horses	03/01/2019 to 02/28/2020	*30 – 40%*		

DROUGHT CONTIGENCY (2209.13 11-14 R3 supplement2013 19.1 Drought Guideline)

"The question for land managers is not *will* drought occur, but *are land managers prepared for drought*? Land managers and grazing permittees, must plan for drought as a normal part of management and business. The Standardized Precipitation Index (SPI) is a unit of measure that compares recent precipitation values for a period of interest with long term historical values to assess moisture conditions in a given area. In the Southwestern Region, anytime the SPI reaches a value of minus 1.00 or less for the preceeding 12 month period, grazing allotments should be evaluated for existing drought conditions."

The District wants to be proactive and plan for drought like conditions and/or lacking stock water availability when those conditions materialize and incorporate into AOI grazing management and pasture rotation as much as possible.

IV. ALLOWABLE USE STANDARDS (Grazing Intensity)

Allowable use of forage is based on the amount and kind of forage on the allotment, plant needs, range condition, trend, and grazing management strategy. Duration, frequency, and timing may be manipulated within the grazing schedule to meet allowable use standards. Grazing intensity may be described in terms herbage removed during the grazing and/or growing period, or as a utilization level at the end of the growing period. Removal of leaf material, when the plant is actively growing can affect root growth which in turn affects future leaf growth. Sufficient leaf area is essential to support plant functions through photosynthesis.

The allowable use levels for this allotment are established for key areas and key species by pasture for the time period livestock are in a pasture. The use on key species in key areas should be used as a trigger the length of the grazing period in each pasture. The establishment of the utilization standards is consistent with 36 CFR 222 regulations, FSM 2210 and 2230, and FSH 2209.21.

For simplicity, key areas are generally considered as follows: 1) full capacity rangeland located on ridgetops/mesas within a ¼ mile from available water sources; 2) canyon bottoms/riparian areas with free flowing water or springs regardless of distance from water; 3) any area containing full capacity range with erosive soils and insufficient/marginal ground cover to protect the soil; or 4) areas containing habitat, whether occupied, suitable and unoccupied, or potentially suitable habitat, for threatened, endangered, or proposed species that are of concern to the Forest Service.

Key areas should be designated in cooperation with the Forest Service and the permittee.

Grazing Intensity is discussed by Holechek and others (Holechek, Jerry L., Rex D. Pieper, and Carlton H. Herbel. 2004. Range Management, Principles & Practices. Prentice Hall, page 248):

Table 3. Qualitative characteristics of grazing intensity categories used to characterize New Mexico rangelands (Holechek & Galt, 6/00, Rangelands).

Qualitative Grazing Intensity Category	Use of Forage by Weight	Qualitative Indicators of Grazing Intensity
Light to non-use	0-30	Only choice plants (key species) and areas show use. There is no use of poor forage plants

Conservative	31-40	Choice forage plants (key species) have abundant seed stalks; Areas more than a mile from water show little use: About one third to one half primary forage plants show grazing on key areas.
Moderate	41-50	Most of accessible range show use; Key areas show patchy appearance with one half to two thirds of primary forage plants (key species) showing use; Grazing is noticeable 1-1½ miles from water
Heavy	51-60	Nearly all primary forage plants show grazing on key areas: Palatable shrubs show hedging: Key areas show a lack of seed stalks: Grazing is noticeable in areas over 1½ miles from water
Severe	61+	Key areas show a clipped or mowed appearance (no stubble ht.): Shrubs are severely hedged; There is evidence of livestock trailing to forage; Areas over 1½ miles from water lack stubble height.

V. ADMINISTRATION

1. The permittee will record actual use as it occurs; including livestock numbers and dates your permitted livestock are in a pasture. This information will be reported at the next annual validation meeting.

2. Any change or deviation from this Annual Operating Instructions is to be coordinated and confirmed in advance with the District in an AOI amendment. Additionally, as per terms and conditions of the grazing permit, the permittee shall provide 5 days' notice of moving livestock on or off the allotment. Credit or refunds generated are based upon this documentation. If emergency conditions require making a change immediately, the permittee will notify the District as soon as practical.

3. Livestock remaining in pastures beyond the specified rotation date, that are allowed to drift between pastures, or grazing in rested pastures may be considered a violation of your Term Grazing Permit.

4. Livestock should be moved when forage utilization objectives have been met or within 1 week of planned rotation dates, unless changes have been confirmed with District Range personnel.

5. The District may spot check range improvements before the entry date to insure improvements are in a satisfactory condition. Livestock will not be allowed to enter pastures if assigned improvements are not maintained to proper standards. Livestock are not allowed to enter pastures if fences will not keep livestock where they are placed.

VI. SALT AND MINERAL BLOCK

Typically, salt or mineral blocks are not to be placed within a quarter mile of water or drainage bottoms. With District Ranger approval, salt may be placed closer than a quarter of a mile to water for specific purposes. Salt will be used to attract cattle to areas of a pasture typically not utilized and or for soil/range condition treatment purposes. Blocks may be removed by the District if found near water, over-utilized areas, meadow bottoms or roads. Feeding and/or supplements such as molasses are not authorized, unless on a case by case for specific purposes and approved by the District Ranger.

VII. MONITORING

Monitoring and evaluation is an essential aspect of good rangeland management. Monitoring and evaluation can be described as the gathering of information so the manager knows what is happening to rangeland resources and why. The intent of monitoring and evaluation is to test the success of the management strategy and if needed, make adjustments. The following types of monitoring can be collected and will be used by the Forest Service for management decisions.

1. Forage Production
2. Forage Utilization/ Stubble Height measurements.
3. Photo Points
4. Condition of Improvements
5. Actual Use
6. Grazing Response Index
7. Precipitation.

VIII. RANGE IMPROVEMENT CONSTRUCTION / MAINTENANCE

The permittee will maintain all range improvements that are assigned for maintenance on pages 11 – 14 of the Term Grazing Permit. Reconstruction or new improvements requires written authorization by the District Ranger through a Permit Modification. When improvements are completed the permittee will inform District Range personnel to schedule an inspection. Before using machinery to clean any pond within defined wildlife habitat, the permittee is required to give the District Office at least 45 days advance notice so that the tank can be inspected for threatened or endangered species. All work involving the use of heavy equipment will be accomplished only after prior approval of the District Ranger.

Current Year Improvement Scheduled		**YEAR**	**2019**
Improvement Type / ID #	**Completion Date**	**Description/Comments**	**Status Done /Date**
		Water Line in Bee Spring on 515	
		Removal of useless fences so cattle aren't channeled in areas	
		Fence betterment 4 Bar/corral creek – No Bar Mesa along pavement	
		Clean/repair dirt tanks (East Dry/Table Top/Smith Cny)	
		Fix storage tank for Cottonwood Corral	
		Fix corrals in Grey Peak/boundary fence in Main	
	TBD	Discussion on development of new pipeline throughout Allotment	

IX. PROTECTION

The permittee, his agents and employees, when acting within the scope of their employment, and his contractors and subcontractors will protect the land and property of the United States, waived private land and other land under jurisdiction of the Forest Service covered by and used in conjunction with this permit. Protection will include taking all reasonable precautions to prevent, make diligent efforts to suppress and report promptly all fires on or endangering such land and property. During periods of high fire danger, branding fires will be allowed by permit only.

X. ALLOTMENT INSPECTIONS

Forest personnel may conduct periodic brief inspections of pastures within the allotment at any time to verify actual use, improvement conditions, or other non-range related activity. The permittee will be notified and invited to participate on extended (3-5 days) inspections.

Planned inspections for Grazing Year 19:

Pasture	When	Location
TBD		

Notes:

XI. PERMIT CONDITIONS

This Annual Operating Instructions is hereby made a part of the Term Grazing Permit as provided for in Part 2, Section 8(a). It complies with the standards and guidelines found in the Forest Plan.

Failure to comply with any of the terms and conditions specified in Parts 1, 2, and 3 of your Term Grazing Permit may result in suspension or cancellation, in whole or in part, after written notice. This is found in Part 1, Section 3, of your permit.

Jason T. Bruce
PERMITTEE

12-17-18
DATE

E. Holling
DISTRICT RANGER

12/17/2018
DATE

Appendix: 92.14b – Describing Grazing Intensity (FSH 2209.13 – GRAZING PERMIT ADMINISTRATION HANDBOOK CHAPTER 90 – RANGELAND MANAGEMENT DECISIONMAKING.

Grazing intensity may be described in terms herbage removed during the grazing and/or growing period, or as a utilization level at the end of the growing period. It is important to clearly define how intensity is being viewed and described. Removal of leaf material, when the plant is actively growing can affect root growth which in turn affects future leaf growth. Sufficient leaf area is essential to support plant functions through photosynthesis. Heavy to severe intensity or utilization can affect current plant development and growth, as well as growth during subsequent growing seasons.

Grazing Intensity is discussed by Holechek and others (Holechek, Jerry L., Rex D. Pieper, and Carlton H. Herbel. 2004. Range Management, Principles & Practices. Prentice Hall, page 248):

Grazing Intensity as depicted as a utilization level at the end of the growing season as discussed by Holechek and Galt (Holechek, Jerry L. and Dee Galt. 2000. Grazing Intensity Guidelines. *Rangelands* 22(3): 11-14):

Light to non-use	0-30 percent
Conservative	31-40 percent
Moderate	41-50 percent
Heavy	51-60 percent

Severe 61+ percent

Qualitative Grazing Intensity Category	Use of Forage by Weight	Qualitative Indicators of Grazing Intensity
	--- (%) ---	
Light to non-use	0-30	Only choice plants and areas show use; There is no use of poor forage plants.
Conservative	31-40	Choice forage plants have abundant seed stalks; Areas more than a mile from water show little use; About one third to one half primary forage plants show grazing on key areas.
Moderate	41-50	Most of accessible range shows use; Key areas show patchy appearance with one half to two thirds of primary forage plants showing use; Grazing is noticeable in zone 1-1.5 miles from water.
Heavy	51-60	Nearly all primary forage plants show grazing on key areas; Palatable shrubs show hedging; Key areas show a lack of seed stalks; Grazing is noticeable in areas over 1.5 miles from water.
Severe	61+	Key areas show a clipped or mowed appearance (no stubble height); Shrubs are severely hedged. There is evidence of livestock trailing to forage; Areas over 1.5 miles from water lack stubble height.

Qualitative Grazing Intensity Category	Use of Forage by Weight	Stubble Height Guide		Forage Residue Guide[1]
		Blue Grama	Western Wheatgrass	
	-- (%) --	---- (inches)----		(lbs/acre)
Light to non-use	0-30	2.5+	7.0+	435+
Conservative	31-40	2.0-2.5	4.0-5.0	350-435
Moderate	41-50	1.5-2.0	3.0-4.0	265-350
Heavy	51-60	1.0-1.5	2.0-3.0	180-265
Severe	> 60	< 1.0	< 2.0	< 180

[1]We have found residue guidelines developed by Benient (1969) for blue grama range lands in Colorado apply well to New Mexico blue grama rangelands.

Qualitative Grazing Intensity Category	Use of Forage by Weight	Stubble Height Guide					
		Black Grama	Dropseed	Threeawn	Tobosa	Sacaton	Sideoats Grama
	--- (%) ---	---------- (inches) ----------					
Light to non-use	0-30	5+	9+	5+	9+	16+	9+
Conservative	31-40	4-5	8-9	4-5	7-9	14-16	8-9
Moderate	41-50	3-4	6-8	3-4	5-7	12-14	6-8
Heavy	51-60	2-3	4-6	2-3	3-5	10-12	4-6
Severe	> 60	< 2	< 4	< 2	< 3	< 10	< 4

Qualitative Grazing Intensity Category	Use of Forage by Weight	Stubble Height Guide				
		Arizona Fescue	Western Wheatgrass	Intermediate Wheatgrass	Mutton grass & Kentucky Bluegrass	Mountain Muhly
	--- (%) ---	----------	----------	(inches)	----------	----------
Light to non-use	0–30	8+	7+	10+	5+	5+
Conservative	31–40	6–7	4–5	8–10	4–5	4–5
Moderate	41–50	5–6	3–4	6–8	3–4	3–4
Heavy	51–60	4–5	2–3	4–6	2–3	2–3
Severe	>60	<4	<2	<4	<2	<2